

NOAA Navigation Services Office of Coast Survey FY10 Update

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National Ocean Service
Office of Coast Survey**

National Oceanic and Atmospheric Administration

***Hydrographic Services Review Panel
May 5-6, 2010***



HSRP Most Wanted Recommendation #1

Aggressively Map the Nation's Shorelines and Navigationally Significant Waters

Surveys in Navigationally Significant Areas

- 2009 – NOAA and contractors surveyed 3219 SNM
- 2010 – 2200 SNM to date, with target of 2600 SNM
- Impacts on 2010 Performance:
 - *Hassler* delays
 - Extended *Rainier* major repair period
 - Result of additional MRP funds from ARRA, so positive for the program overall

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Aggressively Map the Nation's Shorelines and Navigationally Significant Waters

ARRA \$40M Stimulus Funding Update

- Allocated between OCS, CO-OPS, NGS, and NOAA Nat'l Geophysical Data Center
- Bought roughly 1900 SNM of data
 - Hydrographic surveys (8 areas, 8 contractors) -- \$32M
 - Water levels -- \$2.5M
 - Shoreline -- \$2M
 - Charting -- \$2M
 - Data archiving -- \$.5M
 - VDatum -- \$1M
- To date, 1809 of 1900 SNM have been surveyed
- Also 460 miles of updated shoreline in LA
 - Updated shorelines for U.S. portions of Lakes Ontario, Erie, Huron, and Superior, and for 27 top U.S. ports



HSRP Most Wanted Recommendation #1
**Aggressively Map the Nation's Shorelines and
Navigationally Significant Waters**

2010 -- Hydrographic surveys support economy and marine habitat

- NOAA survey vessels *Thomas Jefferson* and *Fairweather* recently departed for 2010 schedule
- Will survey more than a thousand square nautical miles of U.S. waters
- NOAA will also assist the U.S. Navy by surveying in the Bering Straits



2010 Hydrographic Survey Projects CONUS

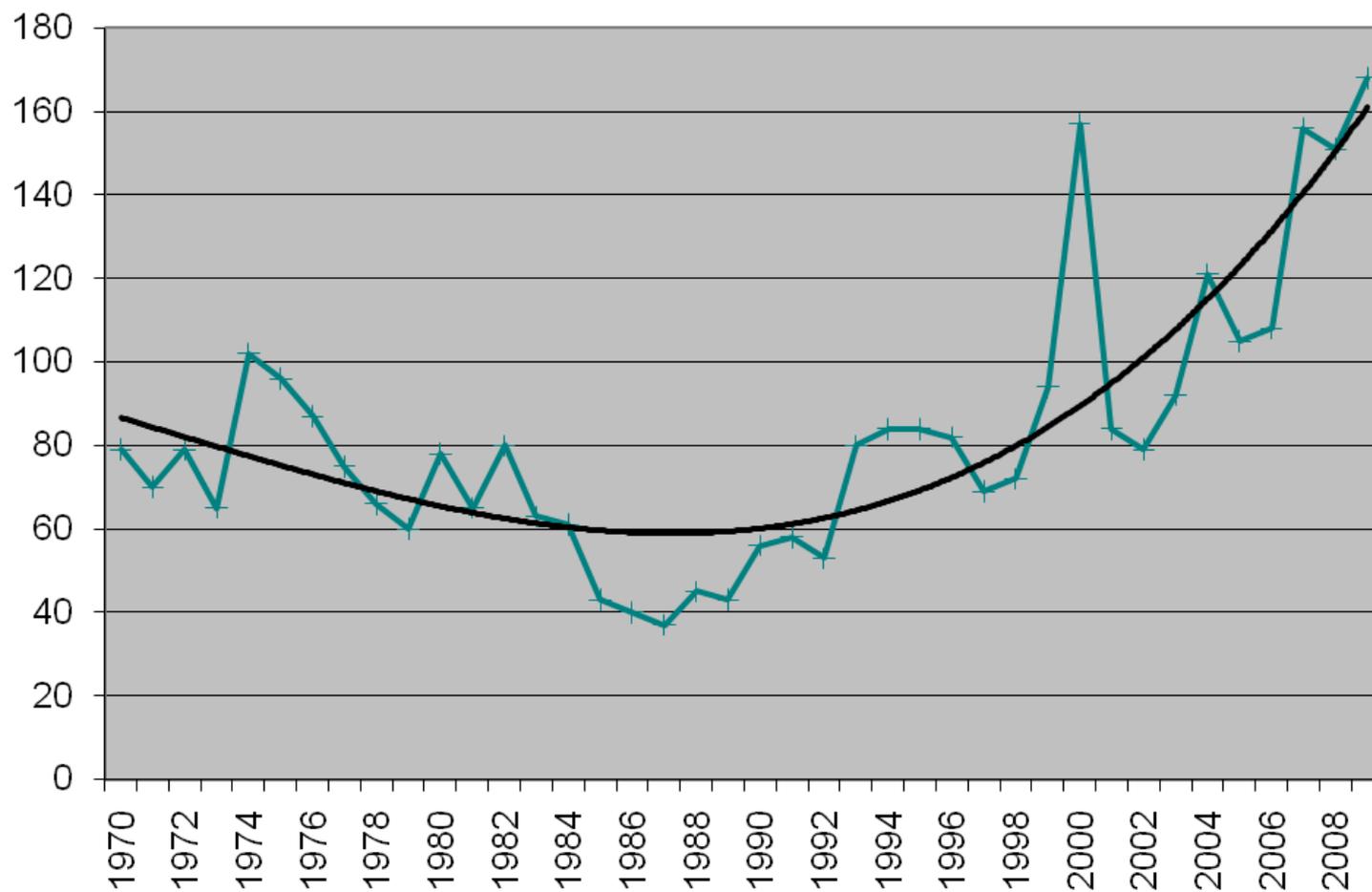


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**Aggressively Map the Nation's Shorelines and
Navigationally Significant Waters**

Ping-to-Chart Process Improvements

- Field collects hydrographic data
 - First ping through last ping
 - Field processing
- Data delivered to Hydro Surveys Division (HSD)
 - Verification, quality assurance
 - Compilation product to update chart
- HSD delivers to Marine Chart Division (MCD)
 - MCD updates nautical chart
 - Distributes to public

Surveys Received



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Navigationally Significant Waters**

Backlog History

- Improvements in field data acquisition (GPS, multibeam, computer processes, etc.)
- Increases in field units (contractors)
- Office processing in HSD could not keep up
- “Backlog” was in HSD
 - Spring 2008, approached 390 surveys “in the queue” awaiting compilation and delivery to MCD

Backlog Reduction Results

HSD Total Ping to Chart



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Ping-to-Chart Summary

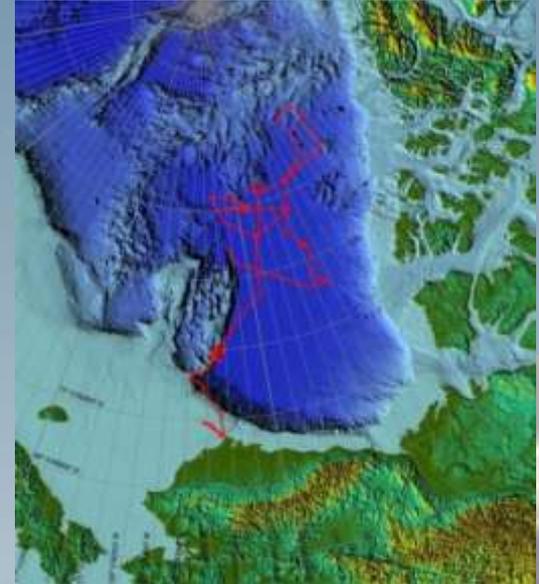
- We've made great strides in processing and delivery time.
- FY09: 168 surveys in, 284 out
- Looking ahead...
 - Continue reducing inventory
 - Support IOCM
 - Data availability from NGDC

HSRP Most Wanted Recommendation #1

Aggressively Map the Nation's Shorelines and Navigationally Significant Waters

Mapping the Arctic floor

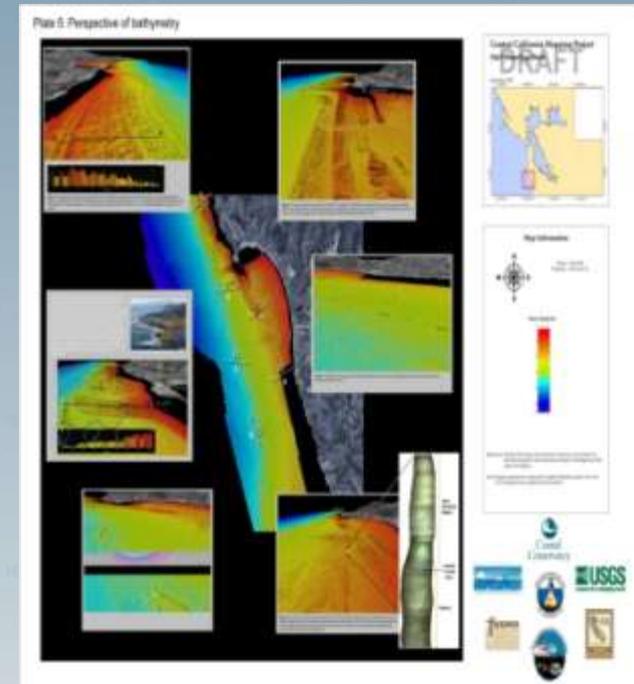
- Mapping effort Aug – Sept on USCG icebreaker *Healy*
- Follows 2009 discovery that continental slope may be 100 miles farther from the U.S. coast than previously assumed
- Data will help decision-makers determine potential for U.S. claim to extended continental shelf under Law of the Sea
- 4th expedition by NOAA and partners to map the seafloor in the northern Chukchi Sea



HSRP Most Wanted Recommendation #2

Integrate Coastal Mapping Efforts and Ensure Federally Maintained Channels, Approaches and Anchorages are Surveyed to the Highest Standard

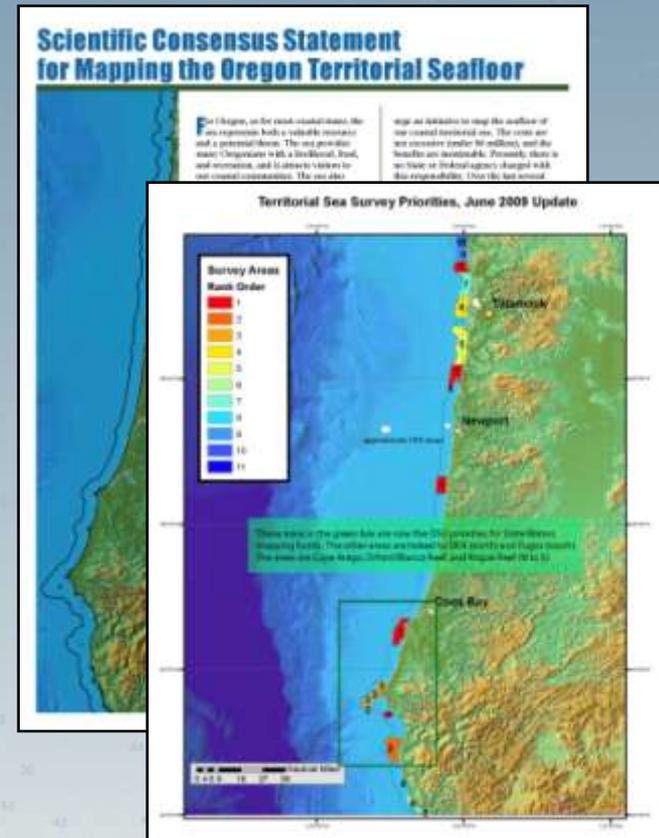
- 2010 Report to Congress on NOAA's Integrated Ocean and Coastal Mapping Initiative (OCMIA action):
 - Complete, undergoing NOAA clearance before being transmitted to Congress
- Inter-agency Report to Congress on OCMIA implementation progress in work, due 10/20/10



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Integrate Coastal Mapping Efforts and Ensure Federally Maintained Channels, Approaches and Anchorages are Surveyed to the Highest Standard

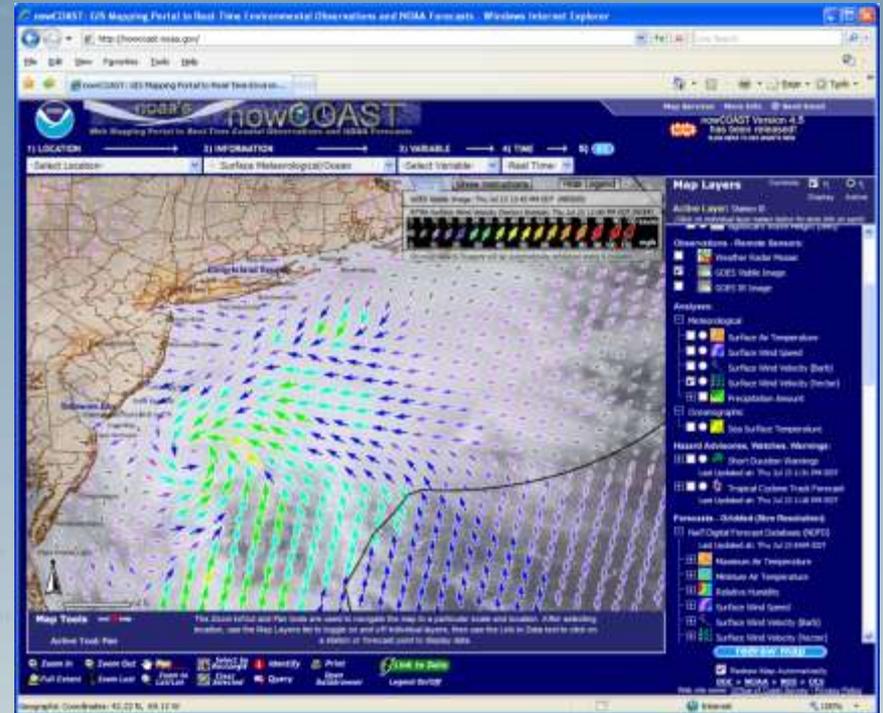
- Interagency Working Group continues to meet on communication and interagency cooperation:
 - Draft common specification for airborne coastal mapping and charting data
 - Coordinate airborne coastal mapping and charting activities



HSRP Most Wanted Recommendation #3

Modernize Heights and Implement Real-time Water Level and Current Observing Systems in All Major Commercial Ports

- Coast Survey recently unveiled a new Web service for nowCOAST, a map-based online gateway to ocean and weather observations and forecasts.
- Users can now view nowCOAST's ocean & weather information from
 - a desktop computer,
 - another mapping website
 - or even an iPhone or iPod Touch.



NOAA's nowCOAST integrates near-real-time surface observational, satellite imagery, forecast, and warning products from NOS, NWS, NESDIS, and OAR.

HSRP Most Wanted Recommendation #4

Strengthen NOAA's Navigation Services Emergency Response and Recovery Capabilities

NOAA and Contract Survey Teams Respond Quickly to Keep Marine Transportation Moving Safely

- January 23 – Oil spill near Port Arthur, Texas
 - 424K gallons of crude oil spilled when T/V *Dixie Vengeance* collided with tanker *Eagle Otome*
 - ORR and Coast Survey were on scene
- Maine's Cobscook Bay – Navigation Response Team searched for several vessels lost with fishermen on board.
 - Combined state/fed/local effort to discover why vessels had gone.



HSRP Most Wanted Recommendation #4
**Strengthen NOAA's Navigation Services Emergency
Response and Recovery Capabilities**

Deepwater Horizon Response

- Navigation managers working with ports, industry, USCG to keep info flowing
- New special chart products updated daily
- Oceanographic data going to OR&R to build oil trajectory
- nowCoast and JHC supporting mapping integration
- Aerial photo missions getting underway
- Water-level and current meters are gathering data
- Examining possible use of multibeam for seafloor oil detection, damage assessment
 - If supplemental funding is available

HSRP Most Wanted Recommendation #5

Disseminate NOAA's Hydrographic Services Data and Products to Achieve Greatest Public Benefit

Electronic Navigational Charts

- Next Generation Nautical Charting System
 - One system for all formats of charts, from paper and raster to ENC's
 - Vendors for COTS system solution selected, expect to enter transition period within next year
- International Maritime Organization ECDIS
 - Mandate for 2012 is adequate ENC coverage
 - Mandatory carriage requirement implemented in a phased approach beginning July 2012 through 2018

Coast Survey

2010-2015 strategic goals



Be the provider of choice for information needed for safe navigation



Survey and chart U.S. coastal, Great Lakes, and offshore waters



Expand Coast Survey's customer base beyond the traditional navigation community



Achieve organizational and managerial excellence

More Coast Survey progress

- NOAA R/V *Bay Hydro II* was nominated for *WorkBoat* magazine's "10 Significant Boats of 2009" award.
 - *Bay Hydro II* evaluates emerging survey technologies as it collects data in the Chesapeake Bay.
- Coast Survey, Geodetic Survey, and CO-OPS are working jointly on coastal and climate change issues.
 - Two tri-office projects are underway in Mobile Bay and Poplar Island.



Mapping and Charting Budget (\$000)

Description	2009 Enacted (K)	2010 Enacted (K)	2011 Pres Request (K)
<i>M&C Base</i>	47,639	49,487	49,850
<i>ENCs</i>	6,128	6,128	6,128
<i>Shoreline Mapping</i>	2,424	2,424	2,424
<i>Joint Hydro Cntr</i>	7,424	7,424	7,424
<i>Survey Backlog</i>	30,000	31,173	31,173
<i>EEZ Surveys, AK</i>	500	300	
<i>Ordnance Reef UXO - Buoys HI</i>	500		
<i>CA seafloor mapping</i>	1500	300	
<i>Hudson River map</i>	445		
<i>ARRA</i>	40,000		
<i>Total Mapping/Charting</i>	136,560	97,236	96,999



QUESTIONS?

